Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of automatically interpreting a transcribed note using vector processing to generate associated codes, the method comprising the steps of:

(a) segmenting the transcribed note into a plurality of segments;

(b) applying morphing, parsing and, semantic analysis to the segments to generate a normalized file having a standardized form with parse items, said semantic analysis comprising

(1) identifying first type matches between parse items of the normalized file and a plurality of knowledge vectors, each of said knowledge vectors being manually-generated based on prior semantic knowledge and comprising a data structure including

one or more terms, each term having a weight based on the semantic category of the term, the weight being selected from a high weight, a low weight, and a middle weight,

a high weight indicating that a term must be present in a parse item to get a match,

a low weight indicating that a term, if present in a parse item, will improve a match, and

a middle weight,

wherein one or more of said knowledge vectors include a single term representing a numerical interval, wherein the numerical interval is represented in a vector through an interval index that map terms to semantically predefined intervals of acceptable values,

the first type matches being indicative of associations to a single code;,

(2) generating associated codes at least on the basis of the first type matches and on the basis of natural language processing rules applied to the parse items; and

(c) outputting the generated associated codes.

2. (Original) The method of claim 1, wherein the transcribed note is a physician note and the codes are diagnosis or procedure type codes.

3. (Original) The method of claim 1, wherein the transcribed note is a physician note and the codes are evaluation and management type codes.

4. (Original) The method of claim 1, wherein the transcribed note is a physician note, the method further comprising the step of extracting demographic information from the physician note.

5. (Original) The method of claim 1, wherein the transcribed note is a physician note, the method further comprising the step of extracting clinical information from the physician note.

6. (Original) The method of claim 1, wherein the transcribed note includes assertions by more than one person, the method further comprising the step of associating parse items to one of such persons.

7. (Original) The method of claim 1 , further comprising the step of identifying second type matches between parse items and a plurality of semi-knowledge vectors, the second type matches each being indicative of associations to more than one code.

8. (Original) The method of claim 7, further comprising the step of flagging the normalized file when the parse items for which there is identified a second type match does not include a first type match to a standard knowledge vector.

9. (Original) The method of claim 8, further comprising the steps of:

(a) identifying a flagged normalized file; and

(b) generating a request for additional information on the basis of the second type match.

10. (Original) The method of claim 9, wherein the request for additional information involves downloading a record from a database.

11. (Original) The method of claim 9, wherein a response to the request for additional information involves human intervention.

12. (Original) The method of claim 10, wherein the request for additional information involves a specific request for information the response to which would result in a first type match with the parse item that caused the flagging.

13. (Currently Amended) A coding system for automatically interpreting a transcribed note to generate associated codes, comprising:

(a) a master import/export module for retrieving the transcribed note; and

(b) a filter module for processing text associated with the transcribed note to create a normalized file; and

(c) a natural language processing (NLP) engine using vector processing to associate from the normalized file a predetermined set of codes, wherein the NLP engine comprises:

(1) a module for morphing, parsing and semantically analyzing the structures and relations within the normalized file and identifying these in the form of parse items;

(2) a first vector matching module for identifying first type matches between the parse items and a plurality of knowledge vectors, each of said knowledge vectors being manually-generated based on prior semantic knowledge and comprising a data structure including

one or more terms, each term having a weight based on the semantic category of the term, the weight being selected from a high weight, a low weight, and a middle weight,

a high weight indicating that a term must be present in a parse item to get a match,

a low weight indicating that a term, if present in a parse item, will improve a match, and

a middle weight,

wherein one or more of said knowledge vectors include a single term representing a numerical interval, wherein the numerical interval is represented in a vector through an interval index that map terms to semantically predefined intervals of acceptable values,

the first type matches being indicative of associations to a single code; and

(3) a code generator for generating associated codes from the predetermined set of codes on the basis of the first type matches and on the basis of rules applied to the parse items.

14. (Original) The system of claim 13, wherein the transcribed note is a physician note and the codes are diagnosis or procedure type codes.

15. (Original) The system of claim 13, wherein the transcribed note is a physician note and the codes are evaluation and management type codes.

16. (Original) The system of claim 13, wherein the transcribed note is a physician note, the NLP engine further comprising a module for extracting demographic information from the physician note.

17. (Original) The system of claim 13, wherein the transcribed note is a physician note, the NLP engine further comprising a module for extracting clinical information from the physician note.

18. (Original) The system of claim 13, wherein the transcribed note includes assertions by more than one person, the system correlating parse items of the transcribed note to one such persons.

19. (Original) The system of claim 13, wherein the NLP engine further comprises a second matching module for identifying second type matches between the parse items and a plurality of semi-knowledge vectors, the second type matches each being indicative of associations to more than one code.

20. (Original) The system of claim 19, wherein the second matching module flags the normalized file in response to a second type match.

21. (Original) The system of claim 20, wherein the second matching module generates a request for additional information after the normalized file is flagged.

22. (Original) The system of claim 21, wherein the request for additional information involves downloading a record from a database.

23. (Original) The system of claim 21 , wherein a response to the request for additional information involves human intervention.

24. (Original) The system of claim 23, further comprising a coder review workstation interface module, coupled to the second vector matching module, for transmitting the request for additional information to a human coder at a coder review workstation and for forwarding the response from the workstation to the NLP engine in real time.

25. (Original) The system of claim 22, wherein the request for additional information involves a specific request for information the response to which would result in a first type match with the parse item that caused the flagging.

26. (Original) The system of claim 13, further comprising a master process module for updating a record associated with the normalized file to generate a standardized report including the generated codes.

27. (Original) The system of claim 26, further comprising a payer process module coupled to the master process module for updating the record to include payer data information.

28. (Original) The system of claim 26, further comprising a client master module for exporting the record to a client billing system.

29. (Original) The system of claim 13, wherein the NLP engine performs vector processing on a weighted vector basis comprised of high and low weight elements.

30. (Original) The system of claim 13, further comprising a coder review workstation, the workstation including:

(a) an input device for inputting a non-transcribed note; and

(b) a graphical user interface for viewing an encoded record of the non-transcribed note in real time.

31. (Original) The system of claim 30, wherein the input device is one of a keyboard, a mouse, an optical character recognizer, and an automatic speech recognition device.

32. (Original) The system of claim 13, further comprising a coder review workstation, the workstation including:

an input device for inputting a non-transcribed note;

a graphical user interface for displaying a template comprised of fields into which associated portions of the non-transcribed note is entered; and

a template selector for allowing a human coder to select among a plurality of template note modules, each module corresponding to a predefined set of NLP rules for generating said codes.

33. (Currently Amended) A computer program, stored on a computer-readable medium, for interpreting a transcribed note using vector processing to generate associated codes, the computer program comprising instructions for causing a computer to:

segment the transcribed note to generate a plurality of segments;

morph, parse and semantically analyze the segments to generate a normalized file having a standardized form with parse items;

identify first type matches between parse items of the normalized file and a plurality of standard knowledge vectors, each of said knowledge vectors being manually-generated based on prior semantic knowledge and comprising a data structure including

one or more terms, each term having a weight based on the semantic category of the term, the weight being selected from a high weight, a low weight, and a middle weight,

a high weight indicating that a term must be present in a parse item to get a match,

a low weight indicating that a term, if present in a parse item, will improve a match, and

a middle weight,

wherein one or more of said knowledge vectors include a single term representing a numerical interval, wherein the numerical interval is represented in a vector through an interval index that map terms to semantically predefined intervals of acceptable values,

the first type matches being indicative of associations to a single code;

generate associated codes at least on the basis of the first type matches and on the basis of natural language processing rules applied to the parse items; and

output the generated associated codes.

34. (Original) The computer program of claim 33, wherein the transcribed note is a physician note and the codes are diagnosis or procedure type codes.

35. (Original) The computer program of claim 33, wherein the transcribed note is a physician note and the codes are evaluation and management type codes.

36. (Original) The computer program of claim 33, wherein the transcribed note is a physician note, the computer program further comprising instructions for extracting demographic information from the physician note.

37. (Original) The computer program of claim 33, wherein the transcribed note is a physician note, the computer program further comprising instructions for extracting clinical information from the physician note.

38. (Original) The computer program of claim 33, wherein the transcribed note includes assertions by more than one person, the computer program further comprising instructions for associating parse items to one of such persons.

39. (Original) The computer program of claim 33, further comprising instructions for identifying second type matches between parse items and a plurality of semi-knowledge vectors, the second type matches each being indicative of associations to more than one code.

40. (Original) The computer program of claim 39, further comprising instructions for flagging the normalized file when the parse items for which there is identified a second type match does not include a first type match to a standard knowledge vector.

41. (Original) The computer program of claim 40, further comprising instructions for:

(a) identifying a flagged normalized file; and

(b) generating a request for additional information on the basis of the second type match.

42. (Previously Presented) The method of claim 1, wherein a plurality of said knowledge vectors have different lengths.

43. (Previously Presented) The method of claim 1, wherein said knowledge vectors are generated based on prior semantic knowledge.

44. (Previously Presented) The method of claim 43, wherein each of said knowledge vectors comprise a plurality of terms, each term having a weight based on the semantic category of the term.

45. (Previously Presented) The method of claim 1, wherein a plurality of said knowledge vectors are generated manually.

46. (Previously Presented) The method of claim 1, wherein terms assigned a high weight include terms denoting primary medical conditions and body parts.

47. (Previously Presented) The method of claim 1, wherein terms assigned a low weight include adjective denoting severity and quality and topological terms.

48. (Previously Presented) The method of claim 1, wherein said weights are stored separately from the knowledge vectors,

wherein a first set of terms are stored as high weight terms and are applied as high weight terms consistently across the knowledge vectors, and

wherein a second set of terms are stored as low weight terms and are applied as low weight terms consistently across the knowledge vectors.

49. (Previously Presented) The method in claim 1, wherein the weight of a term is resolved at run-time based on whether a term that is present in a source vector is also present in a target vector under comparison.

50. (Cancelled)